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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,653	06/22/2001	James E. Fox	018760.23	7190

21878 7590 12/28/2004

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EXAMINER

FAISON, VERONICA F

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

<b>Office Action Summary</b>	<b>Application No.</b> 09/887,653	<b>Applicant(s)</b> FOX ET AL.	
	<b>Examiner</b> Veronica F. Faison	<b>Art Unit</b> 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-16 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-16 and 20-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

Claims 1, 10, 16, 20 have been amended, claims 22-23 have been added and claims 8, 9 and 17-19 have been canceled. Hence, claims 1-7, 10-16, 20-23 are pending in the application.

### ***Allowable Subject Matter***

The indicated allowability of claims 1-7, 11-15, 20 and 21 is withdrawn in view of the newly discovered reference(s) to Thakkar and EP 1 114850. Rejections based on the cited reference(s) follow.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 20 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Thakkar (US Patent 5,512,089).

Thakkar teaches an ink jet ink composition comprising a liquid vehicle, a pigment and a base (abstract and col. 2 lines 30-35). The reference further teaches that polypropylene glycol has a molecular weight of 425 and a surfactant such as Surfynol TGE (col. 3 lines 10-15). See example 2 and claims 1-17. In example 2, the amount of carbon black in the carbon dispersion is 21%, which converts to 2.9% carbon black.

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Therefore the ratio of pigment to polypropylene glycol is with Applicants claimed range.

The composition as taught by Thakkar appears to anticipate the claimed invention.

Claims 22-23 are rejected under 35 U.S.C. 102(a) as being anticipated by EP 1 114 850.

EP 1 114 850 teaches an ink composition comprising a colorant, glycerin, a glycol compound and water (abstract and page 3 lines 9-10). The colorant is a pigment that has been rendered dispersible and/or dissolved in water without a surfactant or a dispersant (page 3 lines 14-16). The glycol compound is present in the amount of 1 to 30 percent by weight and has a molecular weight is about 130 to 3,000 such as polypropylene glycol (page 4 line 54-page 5 line 36). Water is the main solvent in the ink composition however addition solvents such as 2-pyrrolidone may be present and the ink further comprise pH adjustors, antioxidants and ultraviolet absorbers, preservatives and antimold (page 5 line 40-page 6 line 33). See Comparative Example W3 and W4. In example W3 and W4, the amount of pigment in the dispersion is 10%, which converts to 4.5% pigment. Therefore the ratio of pigment to polypropylene glycol is with Applicants claimed range. The composition as taught by EP 1 114 850 appears to anticipate the claimed invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10-12, 14-16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thakkar (US Patent 5,512,089).

Thakkar is described above, but fails to specifically exemplify the claimed ratio of pigment to polypropylene glycol of at least 1:1 to about 1:2.5 as claimed by applicant.

However, it would have been obvious to one of ordinary skill in the art to use the specific ratio of pigment to polypropylene glycol as claimed by applicant as Thakkar also discloses the use of pigment and polypropylene glycol in overlapping ranges but shows no example incorporating them in the claimed ratio.

Claims 1-7, 10-16 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 114 850.

EP 1 114 850 is described above, but fails to specifically exemplify the claimed ratio of pigment to polypropylene glycol of at least 1:1 to about 1:2.5 as claimed by applicant.

However, it would have been obvious to one of ordinary skill in the art to use the specific ratio of pigment to polypropylene glycol as claimed by applicant as EP 1 114 850 also discloses the use of pigment and polypropylene glycol in overlapping ranges but shows no example incorporating them in the claimed ratio.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 571-272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VFF

  
Mark L. Bell  
Supervisory Patent Examiner  
Technology Center 1700